



CITY OF LODI COUNCIL COMMUNICATION

AGENDA TITLE: Conduct Public Hearing to Consider Introduction of Ordinance Amending Chapter 13.20, "Electrical Service," Article III, "Rates," to Revise Provisions Relating to Net-Metered Energy Generation and Co-Metered Energy Generation (EUD)

MEETING DATE: October 20, 2010

PREPARED BY: Electric Utility Director

RECOMMENDED ACTION: Conduct a public hearing to consider introduction of ordinance amending Chapter 13.20, "Electrical Service," Article III, "Rates," to revise provisions relating to Net-Metered Energy Generation and Co-Metered Energy Generation.

BACKGROUND INFORMATION: On November 18, 2009, the City Council received a preliminary report and opened and continued a public hearing regarding proposed rate revisions for Net-Metered Energy Generation and Co-Metered Energy Generation. Subsequent to that date, staff learned of new provisions in California law that require revisions to the proposed rate ordinance.

Residential and small commercial customers generating electricity with solar and wind facilities of 10 kW or less are net-metered; that is, their meters deduct from their usage the amount they generate, and they are billed on the net. Customers generating electricity with solar and wind facilities greater than 10 kW and less than 1 MW are metered for consumption and generation separately. They pay the retail rate for all their usage and are paid for the energy they generate at a price estimated to offset the Lodi Electric Utility purchases avoided, not the full retail price that also pays for the distribution system and other non-power-supply costs.

State of California Assembly Bill 920 mandates municipally owned utilities to establish a "net surplus electricity compensation" for customers who generate surplus energy during a 12-month period without subsidy from other ratepayers. This affects all solar and wind installations up to 1 MW. The proposed revisions also clarify when EUD would receive credits, such as renewable energy and capacity for generation covered by these riders. Attachment A to this Council Communication is a summary of the proposed revisions to the current ordinance.

FISCAL IMPACT: The proposed revisions will have minor fiscal impact on EUD. Changes in revenue will be offset by reductions in purchased power costs. EUD will recover its cost to provide service.

FUNDING: Not applicable.


Elizabeth A. Kirkley
Electric Utility Director

EAK/KAW/KB/lst

APPROVED:


Konradt Bartlam, Interim City Manager

ATTACHMENT A
SUMMARY of REVISIONS to CURRENT ORDINANCE

Item	Current	Proposed
Price paid for co-metered solar/wind energy	½ retail rate (proxy for average wholesale)	ECA + 8.31c/kWh (proxy for average wholesale)
Eligible customer classes	Residential, small commercial	All
Payment for surplus production	No	Average wholesale price, on request
Net-metered Public Benefits Charge	Charged on net energy	Charged on all energy
Capacity Attributes	Not stated	Belong to LEU
Environmental Attributes	Not stated	Belong to LEU, except Renewable Energy Credits from solar/wind energy up to the amount of energy consumed on-site

ORDINANCE NO. _____

AN ORDINANCE OF THE LODI CITY COUNCIL AMENDING
CHAPTER 13.20, "ELECTRICAL SERVICE," BY REPEALING
AND REENACTING SECTION 13.20.225, "SCHEDULE NEM –
NET ENERGY METERING RIDER," AND SECTION 13.20.227,
"SCHEDULE CEM – CO-ENERGY METERING RIDER"

=====

BE IT ORDAINED BY THE LODI CITY COUNCIL AS FOLLOWS:

SECTION 1. Lodi Municipal Code Section 13.20.225, "Schedule NEM – Net Energy Metering Rider," is hereby repealed and reenacted to read as follows:

A. **PURPOSE:** The purpose of this rider is to establish rates, terms, and conditions for providing net metering services to customers generating electricity using solar and wind facilities of 10kW or less in size. This rider complies with California State legislation requiring every electric utility in the state, including municipally owned utilities, to develop a standard contract or tariff providing for net energy metering, as defined below.

B. **APPLICABILITY:** This schedule is applicable to service for customers where a part or all of the electrical requirements of the customer can be supplied from a solar or wind power production source owned and operated by the customer (customer-generated). Availability of this schedule to eligible customer-generators will be on a first-come, first-served basis and will be available until such time the total rated generating capacity used by eligible customer-generators equals two and one-half percent (2.5%) of the City of Lodi aggregate customer annual peak demand.

The solar or wind generation source must: 1) have a capacity of 10kW or less, 2) be located on the customer-generator's premises, 3) be connected for parallel operation with Lodi's distribution facilities, and 4) be intended for the sole purpose of offsetting a part or all of the customer-generator's own electrical requirements. In no case shall the power or energy generated by the customer-owned solar or wind source be available for resale, except as specified under this rider.

Additional terms and conditions for service, including terms of interconnection and parallel operation, are specified in a customer-specific Electrical Interconnection and Net Energy Metering Payment Agreement.

C. **RATES:** Charges for electricity supplied by the City will be based on metered usage in accordance with Special Conditions (3) and (5) below. Rates charged under this schedule will be in accordance with the eligible customer-generator's otherwise applicable rate schedule. Public Benefit charges and monthly customer charges shall not be by-passable.

D. SPECIAL CONDITIONS:

1. Other Agreements: A signed Electrical Interconnection and Net Metering Payment Agreement between the customer-generator and the City is required for service under this schedule.
2. Metering Equipment: Net energy metering shall be accomplished using a single meter capable of registering the flow of electricity in two directions. If customer's existing electrical meter is not capable of measuring the flow of electricity in two directions, the customer-generator shall be responsible for all expenses involved in purchasing and installing a meter that is capable of measuring electricity in both directions.
3. Net Energy Metering and Billing: Net Energy is defined as measuring the difference between the electricity supplied by the City through the electric grid to the eligible customer-generator and electricity generated by an eligible customer-generator and fed back into the electric grid over a 12-month period.

In the event that the electricity supplied by the City during the 12-month period exceeds the electricity generated by the eligible customer-generator during the same period, the eligible customer is a net electricity consumer and the City shall bill the customer for the net consumption during the 12-month period based on the retail price per kilowatt-hour for eligible customer-generator's rate class over the same period.

The City shall provide the customer-generator with net electricity consumption information on each regular bill. That information shall include the current amount owed to the City for the net electricity consumed. Customer-generator may exercise the option to pay monthly for the net energy consumed, but in any event shall be responsible for any payments due at the end of each 12-month period.

4. Attributes: Any Capacity Attributes or Environmental Attributes associated with the renewable energy produced by the customer-generator at sites subject to this schedule shall belong to the City with the sole exception of Renewable Energy Credits for solar and wind generation up to the amount of on-site consumption. Capacity Attributes include, but are not limited to, System Resource Adequacy Capacity and Local Resource Adequacy Capacity, if any. Environmental Attributes include, but are not limited to, Renewable Portfolio Standard recognition, Renewable Energy Credits, Greenhouse Gas Credits, and Emission Reduction Credits, if any.
5. Excess Energy: Net energy metering will be administered on an annualized basis, beginning with the month of interconnection of the customer's generating system with the City's electrical system.

Electric solar and wind generation production may result in a dollar credit carrying forward to the next billing period. If a credit accumulation results in a net customer-owned generation credit at the end of the annualized year, unused dollar credits will be set to zero and not be carried into the new annualized year unless the customer-generator affirmatively elects to be paid for such excess. If the customer-generator so elects, the City shall either pay the customer-generator or credit the customer generator's account for such excess at the Baseline Energy Cost rate specified in Schedule ECA plus the Energy Cost Adjustment rate averaged for the billing periods with excess generation.

- 6, Rules and Regulations: Other conditions specified in the City of Lodi Electric Utility Department's Rules, Regulations and Engineering Standards shall apply to this electric rate schedule.

SECTION 2. Lodi Municipal Code Section 13.20.227, "Schedule CEM – Co-Energy Metering Rider," is hereby repealed and reenacted to read as follows:

- A. **PURPOSE:** The purpose of this rider is to establish rates, terms, and conditions for providing co-energy metering service to customers generating electricity using solar and wind facilities greater than 10 kW and not more than 1 MW in size. This rider complies with California State legislation allowing municipally owned utilities to develop a standard contract or tariff providing for co-energy metering, as defined below.

- B. **APPLICABILITY:**

This schedule is applicable to service for customers where a part or all of the electrical requirements of the customer can be supplied from a solar or wind power production source owned and operated by the customer (customer-generator). Availability of this schedule to eligible customer-generators will be on a first-come, first-served basis and will be available until such time the total rated generating capacity used by eligible customer-generators equals two and one-half percent (2.5%) of the City of Lodi aggregate customer annual peak demand.

The solar or wind generation source must: 1) be rated not more than 1 MW and not be eligible for Schedule NEM – Net Energy Metering Rider, 2) be located on the customer-generator's premises, 3) be connected for parallel operation with Lodi's distribution facilities, and 4) be intended for the sole purpose of offsetting a part or all of the customer-generator's own electrical requirements. In no case shall the power or energy generated by the customer-owned solar or wind source be available for resale, except as specified under this rider.

Additional terms and conditions for service, including terms of interconnection and parallel operation, are specified in a customer-specific Electrical Interconnection and Co-Energy Metering Payment Agreement.

- C. **RATES:** Charges for electricity supplied by the City will be based on the co-metered usage in accordance with Special Conditions (3), (4), and (6) below. Rates charged under this schedule will be in accordance with the eligible customer-generator's otherwise applicable rate schedule.

1. Energy Supplied Charges: The metered electricity supplied by the City to the customer-generator over the applicable billing period will be billed at the applicable service rate in effect when the service was rendered. All conditions, charges, adjustments and taxes under the applicable rate schedule shall be in effect. None of the charges of the applicable rate schedule shall be by-passable.
2. Energy Transmitted Credit: The metered solar and wind electricity generated by the customer-generator and supplied to the City over the applicable billing period will be credited at the Baseline Energy Cost rate specified in Schedule ECA plus the Energy Cost Adjustment rate for the applicable billing period.

D. SPECIAL CONDITIONS:

1. Other Agreements: A signed Electrical Interconnection and Co-Energy Metering Payment Agreement between the customer-generator and the City is required for service under this schedule.
2. Metering Equipment: Co-Energy metering shall be accomplished using two meters – the customer revenue meter of record and a separate generation meter. The customer-generator shall be responsible for all expenses involved in purchasing and installing required meters.
3. Co-Energy Metering: Co-Energy metering is defined as the separate measurement of (i) the electricity supplied by the City through the electric grid to the eligible customer-generator and (ii) the electricity generated by an eligible customer-generator from the customer-owned solar or wind source.
4. Co-Energy Billing: The customer-generator shall receive a “net bill” from the City for each billing period. The co-energy metering net billing calculation shall be composed of the Energy Supplied Charges less the Energy Transmitted Credit.

All net charges are due at the time of billing. Electric generation production may result in a dollar credit carrying forward to the next billing period, subject to Special Condition (6) below.

5. Attributes: Any Capacity Attributes or Environmental Attributes associated with the renewable energy produced by the customer-generator at sites subject to this schedule shall belong to the City with the sole exception of Renewable Energy Credits for solar and wind generation up to the amount of on-site consumption. Capacity Attributes include, but are not limited to, System Resource Adequacy Capacity and Local Resource Adequacy Capacity, if any. Environmental Attributes include, but are not limited to, Renewable Portfolio Standard recognition, Renewable Energy Credits, Greenhouse Gas Credits, and Emission Reduction Credits, if any.
6. Excess Energy: Co-Energy metering will be administered on an annualized basis, beginning with the month of interconnection of the customer's generating system with the City's electrical system. Electric generation production may result in a dollar credit carrying forward to the next billing period. If a credit accumulation results in a net customer-owned generation

credit at the end of the annualized year, unused dollar credits will be set to zero and not be carried into the new annualized year unless the customer-generator affirmatively elects to be paid for such excess. If the customer-generator so elects, the City shall either pay the customer-generator or credit the customer generator's account for such excess at the Baseline Energy Cost rate specified in Schedule ECA plus the Energy Cost Adjustment rate averaged for the billing periods with excess generation.

7. Rules and Regulations: Other conditions as specified in the City of Lodi Electric Utility Department's Rules, Regulations and Engineering Standards shall apply to this electric rate schedule.

SECTION 3. No Mandatory Duty of Care. This ordinance is not intended to and shall not be construed or given effect in a manner which imposes upon the City, or any officer or employee thereof, a mandatory duty of care towards persons or property within the City or outside of the City so as to provide a basis of civil liability for damages, except as otherwise imposed by law.

SECTION 4. Severability. If any provision of this ordinance or the application thereof to any person or circumstances is held invalid, such invalidity shall not affect other provisions or applications of the ordinance which can be given effect without the invalid provision or application. To this end, the provisions of this ordinance are severable. The City Council hereby declares that it would have adopted this ordinance irrespective of the invalidity of any particular portion thereof.

SECTION 5. All ordinances and parts of ordinances in conflict herewith are repealed insofar as such conflict may exist.

SECTION 6. This ordinance shall be published pursuant to law and shall become effective 30 days from the date of passage and adoption.

SECTION 7. The amended Schedules referenced above shall be effective on applicable electric utility billings prepared by the City of Lodi on or after February 1, 2010, or the first date allowable under State law.

Approved this ____ day of _____, 2010

PHIL KATZAKIAN
MAYOR

ATTEST:

RANDI JOHL
City Clerk

State of California
County of San Joaquin, ss.

I, Randi Johl, City Clerk of the City of Lodi, do hereby certify that Ordinance No. ____ was introduced at a regular meeting of the City Council of the City of Lodi held October 20, 2010, and was thereafter passed, adopted, and ordered to print at a regular meeting of said Council held _____, 2010, by the following vote:

AYES: COUNCIL MEMBERS –

NOES: COUNCIL MEMBERS –

ABSENT: COUNCIL MEMBERS –

ABSTAIN: COUNCIL MEMBERS –

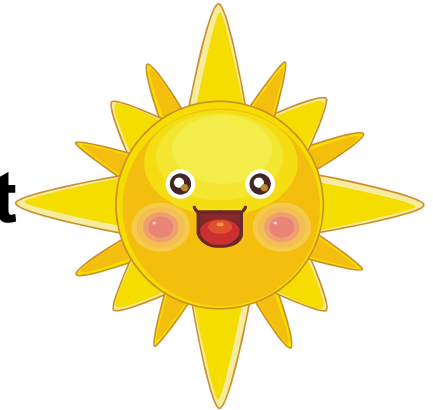
I further certify that Ordinance No. ____ was approved and signed by the Mayor on the date of its passage and the same has been published pursuant to law.

RANDI JOHL
City Clerk

Approved to Form:

D. STEPHEN SCHWABAUER
City Attorney

Electric Utility Department



Public Hearing

Net Energy Metering & Co-Energy Metering



Lodi City Council Meeting
October 20, 2010

Summary

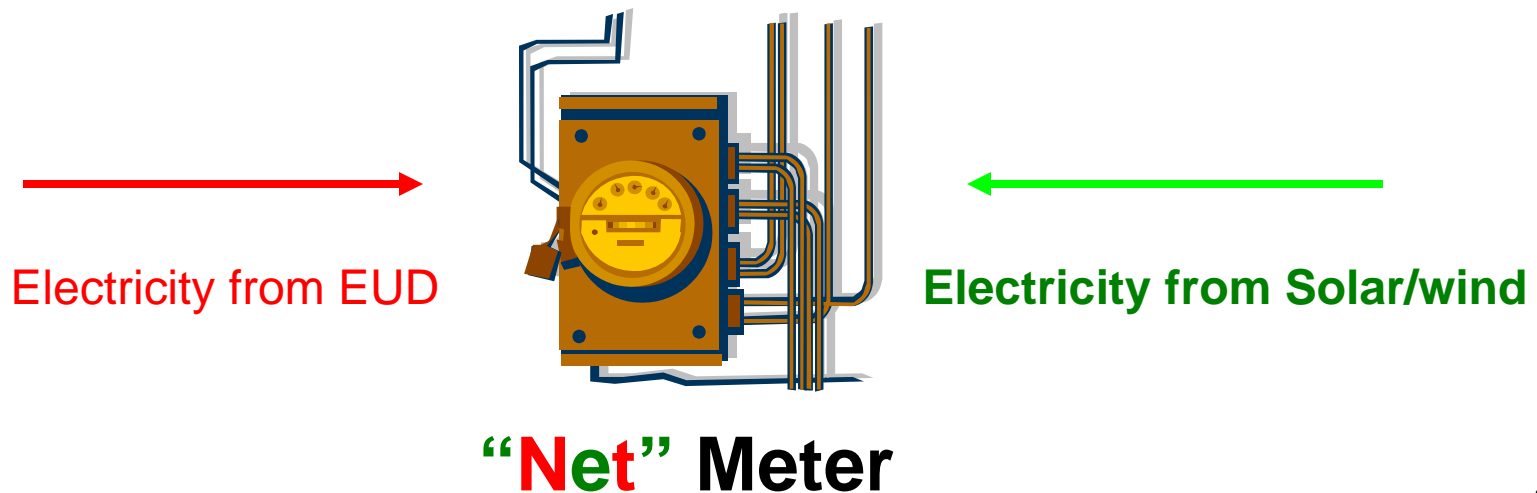
- **Background**
 - Net Energy Metering (up to 10 kW)
 - Co-Energy Metering (10 kW to 1 MW)
- **Proposal**
 - Co-Energy Metering Pricing
 - Eligibility
 - Payment for Surplus Generation
 - Public Benefits Charge
 - Net and Co-Metering Clarifications

Background

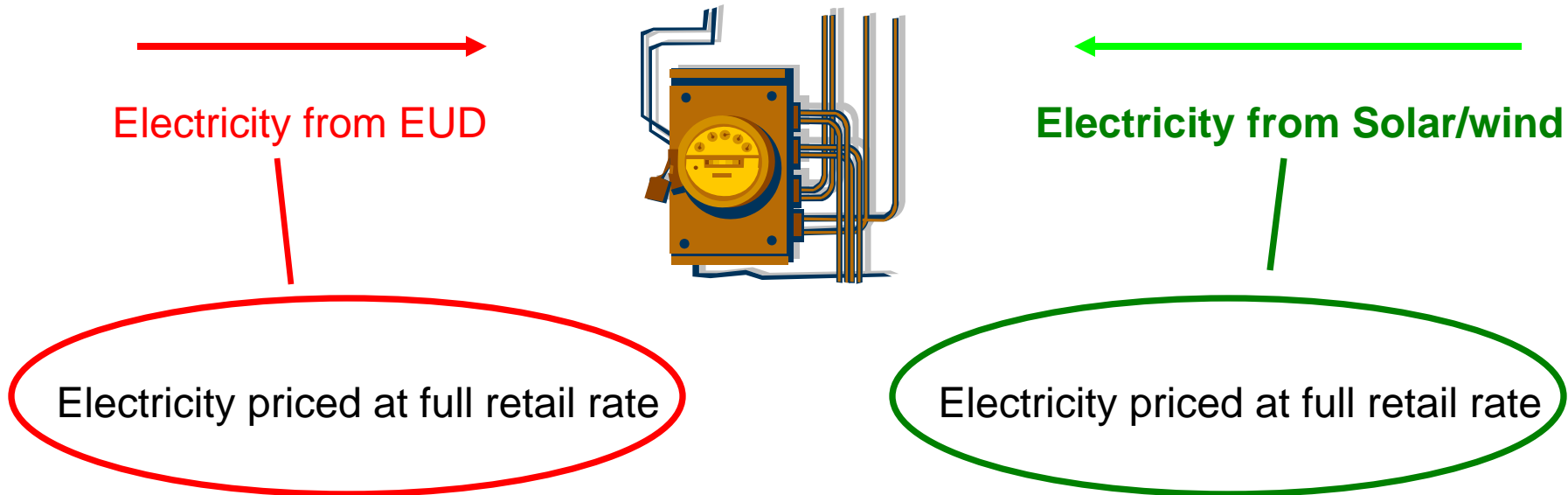
- **Assembly Bill 58 (2002): All CA electric utilities must credit solar/wind energy from small customers**
- **Up to 10 kW: “net energy metering”**
- **10 kW to 1 MW: “co-energy metering”**

Net Energy Metering

- One meter measures “net” of energy delivered to customer from EUD and power from customer’s solar/wind system to EUD
- Effectively, customers receive a price for solar/wind energy equal to the full retail cost of electricity



Net Energy Metering

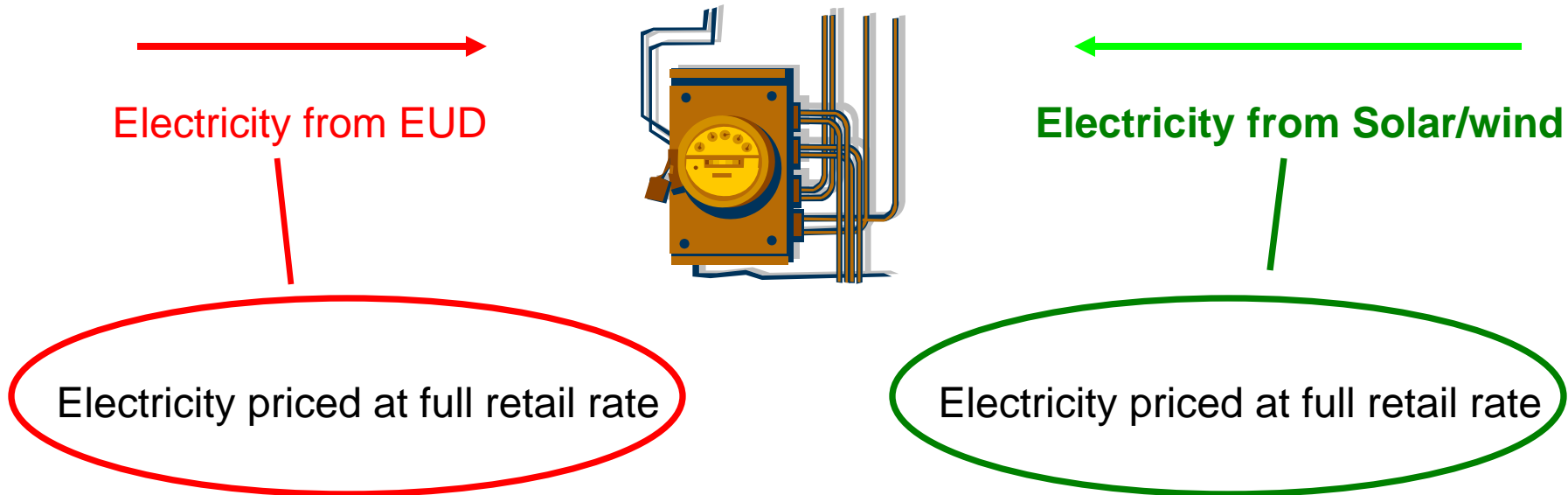


Example for G2 Customer (Summer):

Sales (@ full retail rate)	16.4¢
Purchases (@ full retail rate)	16.4¢
Average Wholesale Energy Cost	8.31¢ + ECA

per kWh

Net Energy Metering



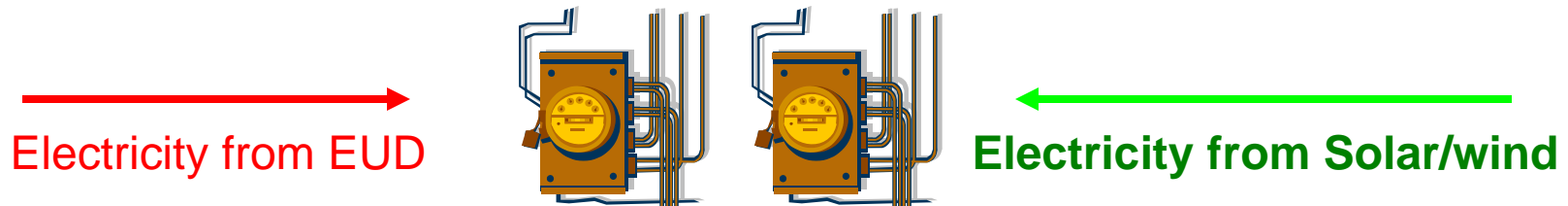
Example for Residential Customer:

Sales (@ full retail rate)	16 to 35 ¢
Purchases (@ full retail rate)	16 to 35 ¢
Average Wholesale Energy Cost	8.31¢ + ECA

per kWh

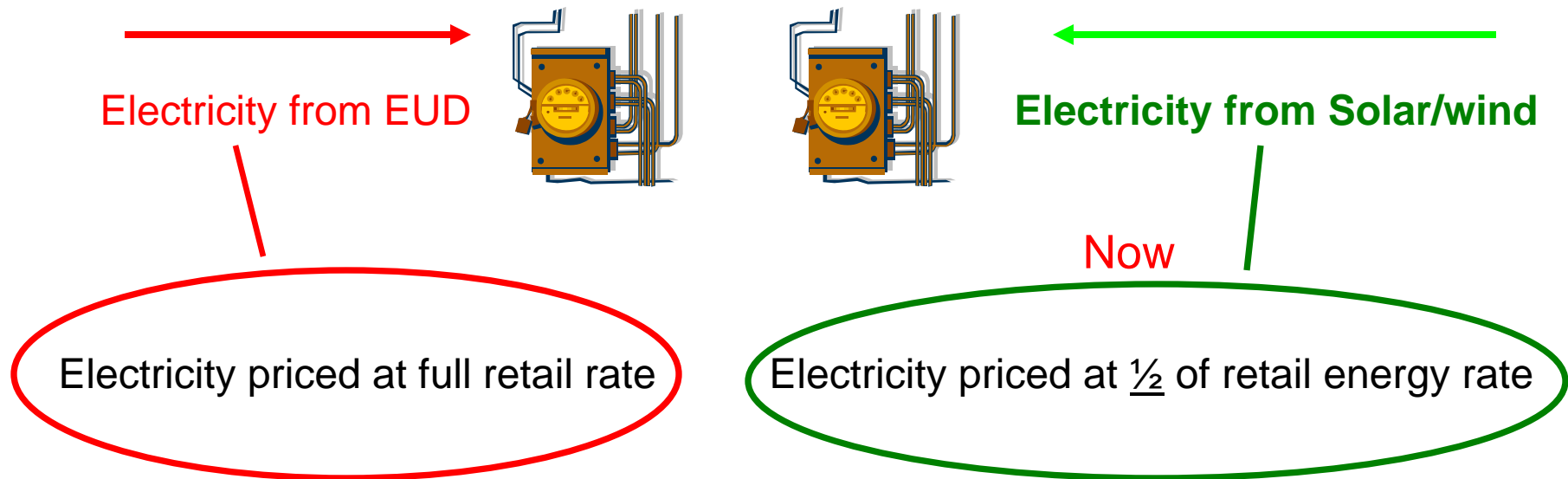
Co-Energy Metering

- Involves two meters
 - 1st to measure energy used by customer
 - 2nd to measure energy from customer's solar/wind system
- Customers receive the wholesale cost of electricity for solar/wind energy
- Proxy (until now) for wholesale cost is $\frac{1}{2}$ of retail energy rate



“Co-Energy” Metering

Co-Energy Metering



Example for G2 Customer (Summer):

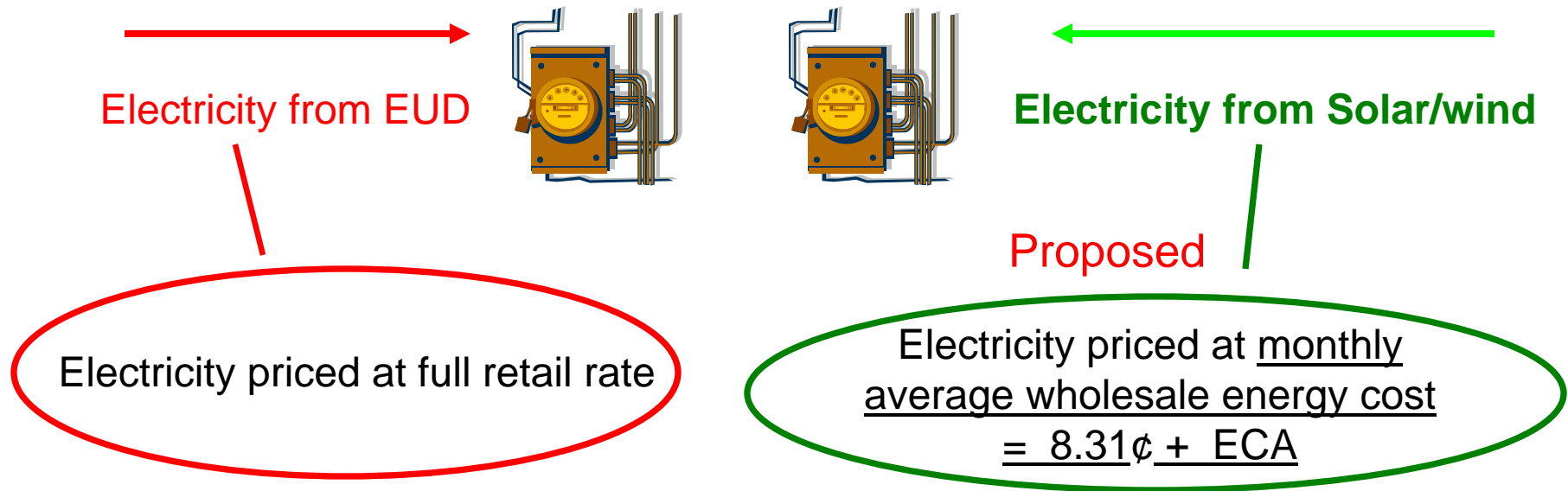
Sales (@ full retail rate)	16.4 ¢
Purchases (@ 1/2 retail rate)	8.2 ¢
Average Wholesale Energy Cost	8.31¢ + ECA

per kWh

Proposal

- **Co-Energy Metering Pricing at monthly
Average Wholesale Energy Cost = 8.31 ¢/kWh + ECA**
- **Co-Energy Metering and Net Energy Metering Eligibility
Open to All Classes**
- **Payment for Surplus Generation**
- **Public Benefits Charge**
- **Net Energy and Co-Energy Metering Clarifications
Environmental and Capacity Attributes**

Co-Energy Metering Pricing



Example for G2 Customer (Summer):

Sales (@ full retail rate)	16.4 ¢
Purchases (average cost)	8.31¢ + ECA
Average Wholesale Energy Cost	8.31¢ + ECA

per kWh

Eligibility

	Now	Per AB 920
Net Energy Metering - Up to 10 kW	Residential (EA) Small Commercial (G1, G2)	All Classes
Co-Energy Metering – 10 kW to 1 MW	Residential (EA) Small Commercial (G1, G2)	All Classes

Payment for Surplus

- Under prior law, EUD received surplus generation without payment.
- Under AB 920, EUD must pay, on request, for surplus energy generated over a 12-month period.
- Propose price for surplus at average wholesale energy cost for months with surplus
= 8.31¢ + average ECA, those months

Public Benefits Charge

- Certain charges, by law, must be “nonbypassable”
- Public Benefits (aka Public Goods) charge
 - For efficiency, renewable energy, low income, RD&D programs
- How to charge unmetered usage of net-energy metered customer?
 - Est: 1500 hr/yr x effective system size kW

Attributes

- **Environmental attributes, for example:**
renewable energy credits (RECs) and
greenhouse-gas credits and
emission reduction credits
- **Capacity attributes, for example:**
System Resource Adequacy and
Local Resource Adequacy
- **Proposed Clarification:**
under Net Energy and Co-Energy Metering
attributes belong to the City
- **Exception:**
RECs, up to amount of customer energy usage,
belong to the customer (per law).
RECs for surplus, belong to EUD.

Summary of Changes

- Co-energy metered solar/wind energy paid at average wholesale energy price
- Eligibility extended to all classes
- Surplus paid at average wholesale energy price, on request
- Public Benefits charge on all energy used by net-metered customer
- Clarification of attributes

Questions/Comments





*Please immediately confirm receipt
of this fax by calling 333-6702*

CITY OF LODI
P. O. BOX 3006
LODI, CALIFORNIA 95241-1910

ADVERTISING INSTRUCTIONS

SUBJECT: PUBLIC HEARING TO CONSIDER INTRODUCING ORDINANCE
AMENDING LODI MUNICIPAL CODE CHAPTER 13.20, "ELECTRICAL
SERVICE," ARTICLE III, "RATES," TO REVISE PROVISIONS RELATING
TO NET-METERED ENERGY GENERATION AND CO-METERED ENERGY
GENERATION

PUBLISH DATE: SATURDAY, OCTOBER 9, 2010

LEGAL AD

TEAR SHEETS WANTED: One(1) please

SEND AFFIDAVIT AND BILL TO: RANDI JOHL, CITY CLERK
City of Lodi
P.O.Box 3006
Lodi, CA 95241-1910

DATED: THURSDAY, OCTOBER 7, 2010

ORDERED BY: RANDI JOHL
CITY CLERK


JENNIFER M. ROBISON, CMC
ASSISTANT CITY CLERK

MARIA BECERRA
ADMINISTRATIVE CLERK

Verify Appearance of this Legal in the Newspaper – Copy to File

LNS Faxed to the Sentinel at 369-1084 at _____ (time) On _____ (date) _____ (pages)
Phoned to confirm receipt of all pages at _____ (time) _____ JPM _____ MB _____ CF (initials)



DECLARATION OF POSTING

PUBLIC HEARING TO CONSIDER INTRODUCING ORDINANCE AMENDING LODI MUNICIPAL CODE CHAPTER 13.20, "ELECTRICAL SERVICE," ARTICLE III, "RATES," TO REVISE PROVISIONS RELATING TO NET-METERED ENERGY GENERATION AND CO-METERED ENERGY GENERATION

On Friday, October 8, 2010, in the City of Lodi, San Joaquin County, California, a Notice of Public Hearing to consider introducing ordinance amending Lodi Municipal Code Chapter 13.20, "Electrical Service," Article III, "Rates," to revise provisions relating to net-metered energy generation and co-metered energy generation (attached and marked as Exhibit A) was posted at the following locations:

Lodi Public Library
Lodi City Clerk's Office
Lodi City Hall Lobby
Lodi Carnegie Forum

I declare under penalty of perjury that the foregoing is true and correct.

Executed on October 8, 2010, at Lodi, California.

ORDERED BY:

**RANDI JOHL
CITY CLERK**


JENNIFER M. ROBISON, CMC
ASSISTANT CITY CLERK

MARIA BECERRA
ADMINISTRATIVE CLERK



CITY OF LODI

Carnegie Forum
305 West Pine Street, Lodi

NOTICE OF PUBLIC HEARING

Date: October 20, 2010

Time: 7:00 p.m.

For information regarding this notice please contact:

Randi Johl

City Clerk

Telephone: (209) 333-6702

EXHIBIT A

NOTICE OF PUBLIC HEARING

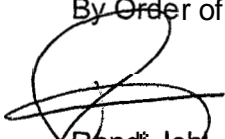
NOTICE IS HEREBY GIVEN that on **Wednesday, October 20, 2010**, at the hour of 7:00 p.m., or as soon thereafter as the matter may be heard, the City Council will conduct a public hearing at the Carnegie Forum, 305 West Pine Street, Lodi, to consider the following matter:

- a) **Introduce ordinance amending Lodi Municipal Code Chapter 13.20, "Electrical Service," Article III, "Rates," to revise provisions relating to net-metered energy generation and co-metered energy generation.**

Information regarding this item may be obtained in the Electric Utility Department, 1331 South Ham Lane, Lodi, (209) 333-6762. All interested persons are invited to present their views and comments on this matter. Written statements may be filed with the City Clerk, City Hall, 221 West Pine Street, 2nd Floor, Lodi, 95240, at any time prior to the hearing scheduled herein, and oral statements may be made at said hearing.

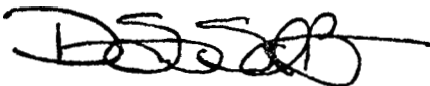
If you challenge the subject matter in court, you may be limited to raising only those issues you or someone else raised at the public hearing described in this notice or in written correspondence delivered to the City Clerk, 221 West Pine Street, at or prior to the close of the public hearing.

By Order of the Lodi City Council:


Randi Johl
City Clerk

Dated: October 6, 2010

Approved as to form:



D. Stephen Schwabauer
City Attorney